

IN THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 4. This sheet, which includes Fig. 4, replaces the original sheet including Fig. 4. Fig. 4 is amended to correct the spelling of “speed” in step 2 and to correct the inequality in step 12.

Attachment: 1 Replacement Sheet

REMARKS

Favorable reconsideration is respectfully requested.

As a threshold matter, it is noted that while the Office Action refers to Claims 1-6, Claim 3 had in fact been canceled in an Amendment filed on February 14, 2006 under Article 19 of the PCT, and the subject matter thereof had been incorporated into Claim 1. [The Article 19 Amendment can be found in PAIR.]

The claims have been amended for clarity and to delete the term “means.”

Interpretation of these terms under 35 U.S.C. § 112, ¶ 6 is therefore no longer believed to be appropriate.

Claims 1-6 were rejected under 35 U.S.C. § 103 as being obvious over the “admitted prior art” represented by Japanese patent publication 2002-192002 (hereinafter, JP ‘002) in view of Japanese patent publication 11-123348 (hereinafter, JP ‘348). This rejection is respectfully traversed.

According to a feature of the invention set forth in Claim 1 as amended under Article 19, a rotary atomizing head type coating machine includes a controller which, upon a target rotational speed of an air motor being changed to a higher speed, outputs an electrical quantity for an air pressure to the air motor which is higher than that of a new steady value for the higher speed, and when the target rotational speed is changed to a lower speed, outputs an electrical quantity for the air pressure which is lower than that of the steady value for the lower speed.

More particularly, Claim 1 recites a rotary atomizing head type coating machine including an air motor and an electropneumatic converter which adjusts an air pressure according to an electrical quantity, wherein the controller computes a necessary value of an electrical quantity as a steady value for driving the air motor steadily in the vicinity of a given target speed and paint discharge rate. A non-limiting example of this is shown in Figures 1

and 4 wherein the controller 13 provides an output to the electropneumatic converter 12 for the air motor 3, and sets a target rotational speed N0 for a paint discharge rate Q0 (Figure 4, step 1). Additionally, when either the target speed or the paint discharge rate is to be changed, the controller computes a new steady value (Figure 4, steps 3-4). In this case the electrical quantity “i” is set to be equal to the quantity “is” for the steady value multiplied by a value which is either smaller or greater than 1, depending on whether the speed is changed to be decreased or increased, respectively (Figure 4, steps 9 and 8). This suppresses a time lag which might otherwise occur during the alteration of settings in operating conditions (page 7, lines 8-17).

According to the Office Action, the subject matter of original Claim 1 would have been obvious from JP ‘022 in view of JP ‘348. In particular, JP ‘022 was deemed to disclose a rotary atomizing head type coating machine including an air motor, a speed sensor, an air source, an electropneumatic converter and a controller adapted to control an electrical quantity on the basis of the detected rotational speed and target rotational speed. JP ‘348 was cited to teach an automatic feedback controller using desired settings to drive the air motor at a constant rate to provide uniform spray despite fluctuations in the spray parameters.

On the other hand, the Office Action did not assert that either JP ‘022 or JP ‘348 discloses the features of Claims 2-6, including the higher/lower than steady value feature of Claim 3 which had been incorporated into Claim 1. Instead, the Office Action stated that the “adaptation or programming of the controller to regulate parameters mentioned above and/or parts of the apparatus so as to provide for uniformity in coating of a substrate/article is deemed to be within the purview of one skilled in the art.” However, the Office Action did not give any reason why a controller “adapted to output to said electropneumatic converter an electrical quantity for an air pressure higher than that of said new steady value when said target rotational speed is to be changed to a higher speed ... and an electrical quantity for an

air pressure lower than that of said new steady value when said target rotational speed is to be changed to a lower speed” would have been “within the purview of one skilled in the art,” even without a teaching in the cited prior art.

As a threshold matter, it is respectfully submitted, without such reasons, the conclusion of the outstanding rejection fails to even rise to the level of a *prima facie* case of obviousness. M.P.E.P. § 2142. That is, “the key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.* [citation omitted] noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that ‘rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.’” *Id.* Accordingly, the unsupported conclusion that a claim feature that is not taught in the prior art “is deemed to be within the purview of one skilled in the art” is insufficient to establish a *prima facie* case of obviousness.

Beyond this, a controller adapted to output an electrical quantity for an air pressure which is higher/lower than the new steady value when the target rotational speed is to be changed would not have been obvious to one skilled in the art. There is no teaching in the cited prior art that would have motivated one skilled in the art to have provided such a “higher/lower” electrical quantity, and the “higher/lower” electrical quantity feature provides the improved result of suppressing a time lag which might otherwise occur during the alteration of settings in operating conditions (page 7, lines 8-17).

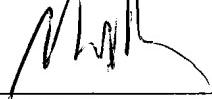
Moreover, the “higher/lower” electrical quantity feature cannot be dismissed as the mere predictable use of a known technique in the art according to its established function (*KSR International Co. v. Teleflex Inc.*), both because there is no evidence that setting the

electrical quantity for an air motor to be higher/lower than that for the steady speed when a target rotational speed is to be changed was a known technique in the art, and because the aforementioned improved result of suppressing a time lag would not have been predictable from the prior art. It is therefore respectfully submitted that Claim 1 and its dependent claims define over the cited prior art.

Applicants therefore believe that the present application is in a condition for allowance and respectfully solicit an early Notice of Allowability.

Respectfully submitted,

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